Proper Handling Pays

The importance of proper handling of sweetpotatoes, from the farmer's field to the consumer's kitchen, cannot be overemphasized. Studies show that significant postharvest losses occur because of improper handling and other factors. On average in the United States, 20 to 25 percent is lost in sweetpotatoes during curing and storage, another 5 to 15 percent is lost during shipping and retailing, and an additional 10 to 15 percent is lost after sweetpotatoes reach the consumer. In total, poor handling practices may result in the loss of more than half the harvested sweetpotatoes before they reach the consumer's table.

Providing consumers with an acceptable product (Figure 1) demands attention to the unique postharvest requirements of sweetpotatoes. This publication has been prepared to acquaint growers, packers, and shippers with the most current information and recommendations for proper postharvest handling of sweetpotatoes. It incorporates new information on good agricultural practices (GAPs) and packing line sanitation and configurations, and the results of an in-depth packing line survey. Also included are plans and operating recommendations for a moderate-sized sweetpotato curing and storage facility with negative horizontal ventilation (NHV). Photographs of common postharvest diseases, abiotic damage not caused by disease organisms, and insects are in Appendix 1.

Figure 1. Proper postharvest handling is required to produce quality sweetpotatoes for retail markets. (PHOTO BY G.HOLMES)

Figure 2. Freshly harvested roots exude latex when cut. (PHOTO BY G. HOLMES)

Figure 3. No latex exudation when cut: a symptom of chilling injury. (PHOTO BY T. SMITH)

Figure 4. Proper cutting of slips is done above the soil line to avoid contact of the knife blade with soil. A contaminated blade may transfer disease organisms from the soil to the cut ends of slips. (PHOTO BY G. HOLMES)

Growing for Improved Postharvest Quality

Successful storage starts with high-quality roots. Events occurring during the growing season may later negatively affect postharvest quality. Some factors such as weather are impossible to control, whereas others (such as fertilization) can be manipulated by a grower to ensure that a quality product goes into storage.

The weather during the growing season, especially just before and during harvest, has a major effect on postharvest quality. An extended drought followed by heavy rain frequently accelerates growth, which often produces roots with